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Exhibit A

Exponent Inc.

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Metso Paper
v.
GE

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Metso Paper
v.
GE

Prepared for

Smith & Duggan
Lincoln North
55 Old Bedford Road
Lincoln, MA 01773

Prepared by

REGISTERED PROFESSIONAL ENGINEER
HARRI K. KYTOMAA
M 34290
EXP. 12/31/10
MECHANICAL
STATE OF CALIFORNIA

Harri K. Kytomaa, Ph.D., P.E.
Corporate Vice President and Principal Engineer
Exponent
9 Strathmore Road
Natick, MA 01760

August 31, 2010

Metso Paper v. GE

Report of H.K. Kytomaa

August 31, 2010

Background

1. In November 2002, Metso Paper decided to upgrade and replace the existing lighting at their Clarks Summit, PA facility. Andrew Kuzmick, a lighting sales engineer, proposed the use of 48 Hubbell Tribay fixtures with open reflectors (i.e. no lens covers) using GE MVR750/VBU/PA 750W Metal Halide lamps for this application. Metso placed an order for the lamps in December 2002 which were delivered to the Clarks Summit facility and installed in February 2003. After the installation of these lamps, Metso operated these lamps continuously starting Monday morning to Friday afternoon, when they were turned off at close of business. The lamps were also operated over the weekend for short periods of time on a regular basis. In 2004, Metso had the ballasts on all the 750W lamp fixtures replaced after loud buzzing was heard from some of the fixtures. During the period following the installation of the new lighting system, there is no indication that Metso kept track of lamp usage hours, nor did Metso have a group-relamping program in place at the time of the fire.

2. On January 21, 2006, Metso personnel working at the facility noticed a fire on materials stored on a rack at their facility. They attempted to put out the fire using fire extinguishers. The fire was eventually put out by the local fire department. Subsequent investigations allege that the fire was started due to the rupture of an

operating GE 750W Metal Halide lamp. Hot particles from the lamp rupture are alleged to have ignited combustible materials stored in the vicinity of one of the lamps. The lamp was recovered from its fixture after the fire and stored as evidence. However, the fixture in which the lamp was installed was discarded by Metso.

Metal Halide lamp technology

3. Metal Halide (MH) lamps, a type of High Intensity Discharge (HID) lights, produce light by an electric discharge that excites a mixture of mercury vapor and the products of the dissociation of halide salts of different metals. The metallic mercury and metal halide salts are contained in a transparent cylindrical arc tube that is made of quartz. The arc tube is enclosed in an outer glass bulb that is filled with an inert gas. Figure 1 shows the construction of a typical metal halide lamp. During use, the arc tube operates under high pressure and high temperatures (as high as 1100°C).

4. Metal halide lamps offer good color quality and operate at high efficiencies over a long life when compared to other lighting technologies. Table 1 compares the typical efficiencies, in lumens per watt (lpw), and rated life of different lighting technologies. MH lamps have particularly high energy efficiency and therefore a corresponding low cost of operation, as is clearly demonstrated by their efficiency relative to common incandescent lamps that are used in almost every home nationwide.

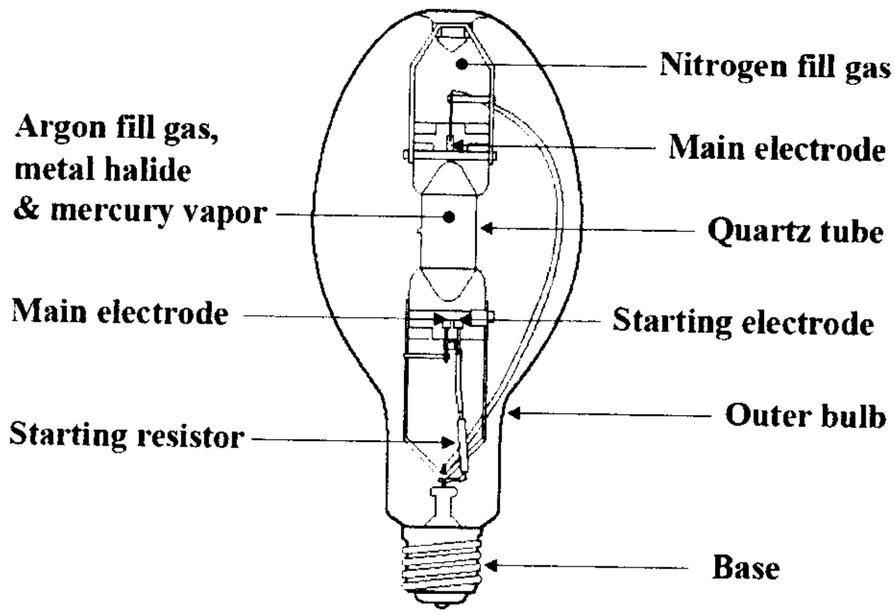

Figure 1: Construction of a typical metal halide lamp.

Lighting Technology	*Lighting Efficiency [lpw]*	*Rated life [hrs]*
Incandescent	5 - 22	750 - 2000
Halogen	12 - 36	2000 - 6000
Compact Fluorescent	27 - 80	9000 - 20000
Fluorescent	75 - 100	12000 - 24000
Mercury Vapor	50 - 60	12000 - 24000
Metal Halide	80 - 115	7500 - 20000
High Pressure Sodium	90 - 140	10000 - 40000

Table 1: Comparison of different lighting technologies showing lighting efficiency and rated life for each technology

5. In addition to their high energy efficiency and good color, metal halide HID lamps provide multiple additional benefits.
6. The more natural lighting afforded by metal halide lamps contributes to workplace safety over other widely used HID lamps such as high pressure sodium lamps (HPS). HPS lamps are used widely over roadways, parking lots and warehouses, but they emit a yellow-orange light.
7. The yellow-orange light from HPS lamps may be acceptable in parking lots, but it hinders one's ability to perceive color in color coded packaging, signs or reading colored instructions in an indoor or outdoor environment.
8. The natural light and color contrast of MH HID lamps reduces worker fatigue in comparison with environments that are lit using HPS lamps.
9. When an HID lamp reaches the end of its operating life, in the overwhelming majority of cases it passively ceases to emit light.
10. In rare circumstances, the HID lamp can shatter during operation, producing hot quartz particles. Such an event is called a "non-passive failure" or NPF in the industry. The risk of NPFs is extremely low if the user replaces the lamp before its rated life and increases when the lamp is operated beyond its rated life instead of replacing it.
11. There are applications where the risks posed by the small chance of hot particles being emitted can be acceptable. Examples of such applications include environments that do not pose a risk of fire. For such applications, the most efficient, most easily maintained, and the lowest cost lighting solution is provided by S-rated lamps operated in open fixtures.

12. The risks associated with S-rated HID lamps are substantially under the control of the user. The HID lamp user is specifically instructed to reduce this low risk of an NPF by a variety of measures.

13. GE recommends that the lamps not be located over combustible materials and that the lamps be group-replaced prior to the end of their rated life instead of running each bulb to failure.

Rated life of HID lamps

14. Manufacturers, including GE, publish rated lives for each lamp model. The rated life of metal halide lamps is based on laboratory tests of a large number of lamps under controlled conditions and cycling the lamps on for 10 hours per start. The rated life is the median life of the tested population of lamps. In other words, rated life is the time after which 50% of the tested lamp population is still working. Many factors inherent in the lamp manufacture and usage introduce variability in the life of individual lamps. The operating life of lamps can vary significantly from its published value depending on its usage and the environment it is used in.

15. The rated life of the GE 750W metal halide lamp involved in this incident is 16,000 hrs.

16. For this type of lamp, GE predicts that the life of a lamp will be shortened significantly if they are operated on cycles shorter than 10 hours. For example, operation of these lamps on a 5 hours per start cycle reduces their expected life to approximately 75% of the published value.

17. Metso paper used the GE lamps on weekends regularly where the lamps were kept on for less than 10 hours each time, thereby shortening their expected life. Metso also operated the lamps during the work week on a cycle that was significantly less than 120 hours per start.

18. Metso paper did not have a group relamping program in place to replace these lamps before the end of their rated life as is recommended by GE. The information regarding the lamps' rated life was provided to Metso in the form of a 2 page cover document as part of Andrew Kuzmick's lighting proposal.

19. The incident lamp was manufactured in May 2002 and installed at Metso's facility in February 2003. Under the operating conditions represented by Metso, the lamp that failed reached the end of its rated life of 16,000 hrs in September, 2005, four months prior to the incident in January, 2006.

20. Metso kept their MH HID lamps on from Monday to Friday and often turned them back on for one or more short durations on the weekends.

21. Metso's weekly operation of the GE 750W lamp was such that the expected median life of their lamps would likely have been lower than the 16,000 hrs presented by GE.

22. Metso did not keep track of the burning hours of the incident lamp or any other lamp at their facility and, at the time of the incident, did not have any program in place to replace the lamps as a group to ensure safe and efficient operation of their light fixtures.

23. Metso's failure to replace lamps before the end of their rated life was in direct violation of all industry and manufacturers' recommendations that were easily

accessible to Metso paper and their contractors who specified, sold and maintained the lighting system. These recommendations are discussed later in the report.

Types of lamps and fixtures

24. MH lamps have fixture requirements that must be followed for safe operation of the lamp depending upon the application in which the lamp is to be used. Lamps that are rated "O" have an internal shroud and can be operated in an open or enclosed fixture. Lamps with an "E" rating may be operated only in an enclosed fixture that is designed to contain fragments of hot quarts or glass that may be emitted from the lamps. Lamps with an "S" rating may be used in open or enclosed fixtures, but they may be used in open fixtures only if they are operated in a vertical ±15° burning position. Used in any other orientation, the lamps must be suitably enclosed.

25. The GE 750W lamp used at the Metso facility was S-rated. It was designed to be operated in a vertical base up position in an open enclosure. For locations where combustibles are present, GE recommends the usage of enclosed fixtures with S-rated lamps. These are designed to contain the hot fragments of the arc-tube in the rare event of a lamp rupture.

26. To this day, Metso continues to operate lamp fixtures with open fixtures and bulbs that are not O-rated at their facility in Clarks Summit, PA where this incident occurred. Figure 2 shows a photograph of two such fixtures taken on 8 April 2010. Figure 3 shows a close up of the lamps in these open fixtures.

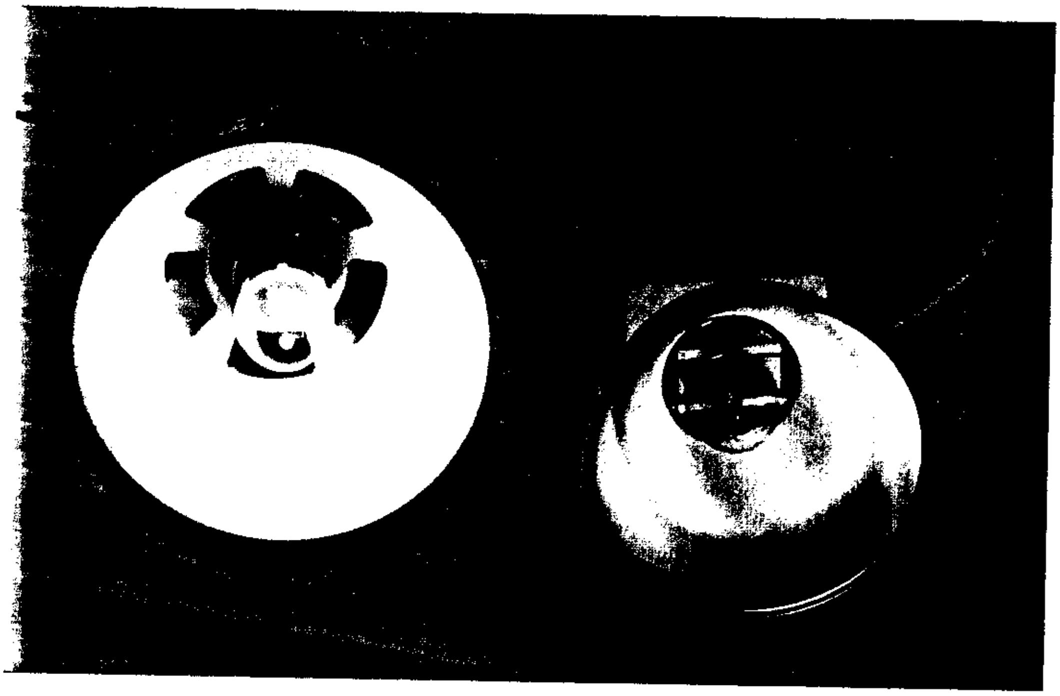

Figure 2: Photograph taken April 8, 2010 showing continuing use of open fixtures by Metso paper with unshrouded lamps.

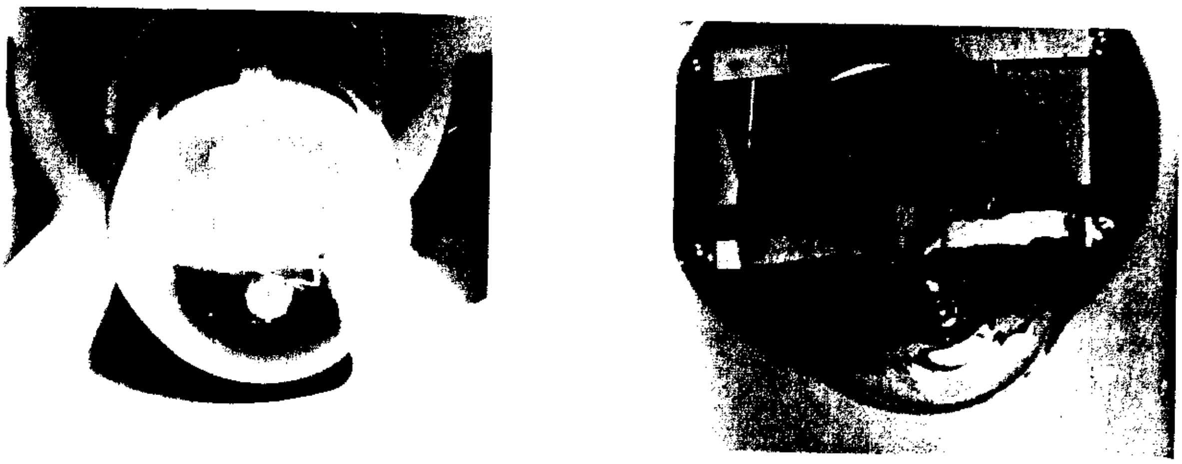

Figure 3: Close up photographs of the unshrouded lamps in use by Metso. Photographs taken April 8, 2010.

Benefits associated with the use of the GE 750W lamp

27. Metso increased the level of lighting in their warehouse significantly when they installed the GE 750W metal halide lamps. Despite the increased level of lighting, the GE 750W lamps achieved substantial savings in the annual cost of lighting the warehouse. Their savings in energy costs allowed for the initial capital expenditure associated with the installation of the new GE metal halide lights and fixtures to be paid back within 2.5 years. Following this pay-back period, Metso would have benefitted from substantial annual savings in lighting costs.

28. GE and all other major HID lamp manufacturers make and sell S-rated lamps. These cost less than O-rated lamps. Similarly, fixture manufacturers make and sell open fixtures that also cost less than enclosed fixtures.

29. To minimize the initial capital expenditure associated with the light fixtures, Metso and the lighting design engineer, Andrew Kuzmick, chose open fixtures and S-rated lamps for the Metso warehouse.

30. Only the owner and operator of the warehouse have the knowledge and the control over the warehouse environment. This places the responsibility of selection of fixtures and lamps and their maintenance and operation solely on the end user, Metso, who should follow the manufacturer's guidelines and recommendations.

31. For applications where even a small risk of exposure to hot arc-tube particles is not acceptable, O-type bulbs that contain these particles are available as are enclosed fixtures, but at added cost.

32. The balance between risk and cost savings can only be managed by the end user, Metso, who must choose the lighting components in a manner that keeps risk at an acceptably low level while managing the cost of their operation.

33. Metso chose a combination of fixtures and lamps that provided significant cost savings in lighting the warehouse. The S-rated GE750W lamp is particularly attractive due to its low operating costs.

34. Industry should not be denied access to this product, the cost savings it provides and its other advantages for the many applications where it can be used with an acceptably low level of risk of fire or injury.

35. In this case, Metso overlooked the recommendations provided by GE and used S-rated lamps in the presence of combustible materials and chose to operate the lamps beyond their rated life instead of group-relamping at or before the end of their rated life.

Costs associated with enclosed fixtures and O-rated lamps

36. The sections below quantify the cost savings associated with the S-rated lamps and the additional cost that would be incurred in using O-rated lamps or enclosed fixtures. Such costs should not be imposed onto end-users in applications where S-rated lamps and open fixtures present an acceptably low level of risk of fire or injury.

37. Enclosures or bulbs that can contain hot particles necessarily create additional optical barriers to the light emission and additional physical barriers to cooling of the bulb, causing the bulb to operate at higher temperatures. These factors tend to reduce the amount of light from the fixture and tend to shorten bulb life.

Cost associated with enclosed fixtures

38. As a result of the reduction in light from enclosed fixtures, more fixtures need to be installed to provide the same amount of lighting in comparison with open fixtures.

39. In order to maintain the same amount of light as the system chosen and installed by Metso, the number of covered 750W lamp fixtures installed would have to have been increased by 4 bringing the total number of lamp fixtures that Metso would have had to purchase to 52.

40. Installation of 52 enclosed light fixtures instead of 48 open fixtures by Metso would have increased their initial capital expenditure by almost $2500 and increased their annual operating costs by $1500. This increased number of lamps still provides a saving in energy over the pre-existing lighting configuration in 2002, but a smaller one. Their annual savings in energy costs would have paid for the initial capital costs of the system over a period of 4.5 years, two years longer than the system that Metso installed with S-type lamps only.

41. The lens of enclosed fixtures requires additional maintenance, since it will collect dust, insects and other debris. This adds to the maintenance cost.

42. The additional maintenance and cleaning of enclosed fixtures also brings about new risks that do not exist for the unenclosed fixtures.

43. Cleaning the lens of an enclosed fixture requires service personnel to regularly climb to the elevation of the luminaire, via ladder, lift, or other elevated platform, all of which increase the risk of injury.

Costs associated with O-rated lamps

44. 750W metal halide bulbs that are O-rated were not available at the time of the original installation. Had Metso chosen the available O-rated 1000W lamps for their installation, a smaller number of lamps and fixtures would have been needed. As a result, the initial capital costs associated with these lamps would have been higher by $750. The O-rated lamps cost more, but are also less efficient in that they create less light for the same amount of electricity. As a result, the annual operating cost of this system would have been higher by $2,800 compared to the 750W system that Metso put in. This increased capital cost and substantially higher operating costs would have required Metso to operate the system for more than 6 years (4 years more than the GE 750W bulb system) to recoup their capital cost, making this lighting system a comparatively greater overhead burden on the facility.

Risk Analysis

45. Virtually all products, including electrical products, have some risk associated with their use. A "safe" product is not a "risk free" product. Rather, the definition of "safe" is "acceptable risk." Risk is measured in terms of frequency and severity.

46. Almost every product or device can be made "safer," *i.e.*, with a lower risk, by designing features into the product that reduce the risk of failure. This almost always makes the product more expensive, less convenient or both. As a society and as users of products we balance cost and risk.

47. Merely presenting more risk to the user does not make a product "unsafe" or "defective." The market has never demanded, and should not demand, that all product users always use the lowest risk product. To require this would lower everyone's standard of living because a lower risk product, absent a technology change, is almost always more expensive.

48. There are no risk free light sources. All existing lighting technology takes energy, usually in electrical form but sometimes in thermal or chemical form, and converts a fraction of that energy into visible light. There is always risk associated with the use of significant energy for any purpose, including lighting.

49. As is often the case with very low risks, the small risk of NPF poses a substantial technical challenge in quantifying just how small it is. The yearly rate of HID lamp induced fires is so low that it is subject to considerable statistical uncertainty.

50. To put the risk of a metal halide lamp NPF resulting in fire for metal halide lamps into perspective, it is much smaller than the risk of a lightning strike resulting in fire. It is extremely rare, but GE still instructs end users to take specific measures to reduce this very small risk.

51. It is estimated that nationally there are 46 million HID luminaires of which about 30 million are metal halide luminaires. It is estimated that, in 2000, a total of about 35 million HID lights were sold in the US of which metal halide lamps numbered 19.5 million.

52. In the three decades that HID lamps have seen wide spread use, lamp NPFs that have been claimed to have resulted in a fire have numbered in the few

dozen. The fraction of these claims that were objectively determined to have actually resulted from an NPF is unknown, but very small.

53. Examination of the millions of records of fire data in the National Fire Incident Reporting System (NFIRS), in the period between 1999 and 2006, filled out by responding fire departments nationwide and compiled by the National Fire Administration showed that eight warehouse fires were listed as having been caused by HID lamps and their fixtures. This included fires reported due to mercury vapor, sodium vapor, metal halide lamps and their respective fixtures. This also includes fires caused by ballasts. The number of fires caused by lamps alone is therefore expected to be less than 8.

54. In the same period, more than 150 fires in warehouses and similar industrial structures were reported as a result of lightning strikes.

55. Examination of the NFIRS data shows that warehouses are at far greater risk of fire from other causes associated with building utilities, such as their heating and ventilation equipment.

56. Heating and ventilation equipment installed in warehouses accounted for 415 fires compared to the 8 fires that were attributed to HID lights and their fixtures in the data collected between 1999 and 2006.

Labeling and communication of hazards

57. The GE MVR750/VBU/PA 750W Metal Halide lamp is not a consumer product and is used in commercial and industrial locations.

58. GE's product literature for the 750W metal halide lamp involved in the incident, as well as their lighting catalogs warned of potential damage due to the improper

use of HID lamps. These materials also specified the rated life of the lamps and recommended that group relamping be done before the end of rated life of the lamps.

59. Information regarding the rated life and relamping of lights prior to the end of their rated life was provided to Metso well before Metso purchased the lights. This information was provided in the form of a short 2-page brochure with the lighting proposal prepared for Metso by Andrew Kuzmick.

60. In addition to the information in GE's catalogs and marketing materials, there was and is widely available literature concerning the small risk associated with nonpassive failure and how to virtually eliminate that risk (*E.g.*: NEMA LSD 25: Best practices for Metal Halide Lighting systems, the IESNA lighting Handbook).

61. Even as early as 1998, insurance industry bodies like Industrial Risk Insurers (IRI) recommended that HID light fixtures not be located above areas where combustible materials are present. They also suggested that users maintain records of lamp operating hours and implement group relamping practices before the end of their rated life. IRI also recommended compliance with manufacturers' guidelines to reduce the risk of fires due to nonpassive failures of metal halide lamps.

62. Commercial insurance companies, like FM Global, in 2002 also suggested that their insured customers follow the requirements shown on manufacturers' bulletins and recommended that users replace their lamps prior to end of rated life by group relamping.

63. It should have been clear to those responsible for maintaining the lights in this warehouse that the MH lamps must be replaced at, or prior to, the end of their rated life in order to minimize the risk of nonpassive failure. It is most effective to replace lights in groups (group relamping) to eliminate the possibility that any one light is used beyond its rated life. It was also clear by 2002 that open metal halide fixtures should not be placed over combustible material and that either protected lamps (shrouded) or lens covers should be used in such applications. These measures were particularly important in light of the fact that Metso ignored GE's and the industry's recommendation to relamp at or prior the end of the rated life of the lamps, and to replace all lamps at once.

Exponent
Failure Analysis Associates

Exponent
9 Strathmore Road
Natick, MA 01760

telephone 508-652-8500
facsimile 508-652-8599
www.exponent.com

Harri K. Kytömaa, Ph.D., P.E., CFEI, CFI
Corporate Vice President

Professional Profile

Dr. Harri Kytömaa is a Corporate Vice President and Director of the Thermal Sciences Practice, specializing in mechanical engineering and the analysis of thermal and flow processes. Dr. Kytömaa applies his expertise to the investigation and prevention of failures in mechanical systems, including combustion equipment. He also investigates fires and explosions, and the determination of their cause and origin. Dr. Kytömaa investigates such failures in aircraft, motor vehicles, marine facilities, industrial and manufacturing complexes, and office and residential occupancies. He has also provided consultation to the power generation, oil and gas, chemical, pulp and paper, and metal smelting industries. Dr. Kytömaa's project experience includes turbines, compressors, boilers, smelters, pneumatic and hydraulic systems, instrumentation, nuclear waste management, heat transfer systems, flammable vapors, flammable liquids, CO formation and migration and cryogenic liquids including LNG and its associated equipment.

Dr. Kytömaa has decades of experience in the area of dynamics and analysis of piping systems containing both liquids and gases. He has developed modeling tools to describe the response of liquid and gas piping systems to artificially induced sources of flow pulsation, as well as to natural sources such as those associated with reciprocating and rotating equipment, and piping components. He has applied these tools to modeling the dynamics and acoustics of drilling fluid filled piping systems for acoustic telemetry and Measurement-While-Drilling systems (MWD), which was one of the enabling technologies for directional drilling. Dr. Kytömaa has also applied his flow and acoustic expertise to gas piping and rotating equipment including gas turbines and compressors. This experience includes the characterization of rapidly varying pressures and forces caused by the interruption of rotating equipment or the sudden closing of valves and their effects.

Dr. Kytömaa has held several academic, research, and consulting positions, including that of Associate Professor of Mechanical Engineering at the Massachusetts Institute of Technology where he was head of the Fluid Mechanics Laboratory. He has also held positions as Visiting Professor at the Helsinki University of Technology and at the DOE Pacific Northwest Laboratory in Washington, and most recently, served as Lecturer in the Department of Mechanical Engineering at the Massachusetts Institute of Technology.

Academic Credentials and Professional Honors

Ph.D., Mechanical Engineering, California Institute of Technology, 1986
M.S., Mechanical Engineering, California Institute of Technology, 1981
B.Sc., Engineering Science, Durham University, England (with Honors), 1979

Registered Professional Mechanical Engineer, California, #34290; Louisiana, #PE.0035054, Massachusetts, #48202; Certified Fire and Explosion Investigator (CFEI) in accordance with the National Association of Fire Investigators (NAFI) National Certification Board per NFPA 921 Section 11.6.4; Certified Fire Investigator (CFI) in accordance with the International Association of Arson Investigators; National Waste Operations and Emergency Response Training, 29 CFR 1910.120; Fire Investigation 1A Certification accredited by the California State Fire Marshal

Sigma Xi; Lewis F. Moody Award for best paper on a subject useful in engineering practice presented to American Society of Mechanical Engineers (ASME), 1993; Henry L. Doherty Professor in Ocean Utilization, 1991–1993; Chairman, Organizing Committee, Engineering Foundation Workshop, Davos, Switzerland, 1993; National Science Foundation Review Panelist, Washington, DC, 1990; National Science Foundation Group Leader, Acoustic Methods Workshop on Visualization of Particulate Two-Phase Flows, Washington, DC, 1990; Diver in the Finnish Navy, rank Able Seaman, Distinguished Service, 1980; Institute of Mechanical Engineers Prize for Outstanding Project Work (United Kingdom), 1979

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Invited Lectures and Presentations

Kytömaa HK, Myers TJ, Ibaretta AF, Ponchaut NF. Anatomy of the failures that led to the Buncefield explosion and fire. Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2009.

Kytömaa H. LNG pool spreading. LNG Safety Workshop, LNG Tech Global Summit 2007, Rotterdam, Netherlands, September 10, 2007.

Kytömaa H. LNG release from a vessel. Mary Kay O'Connor Process Safety Center: CLNG Workshop at the Hamilton Crowne Plaza, Washington, DC, June 12–13, 2007.

Gavelli F, Chernovsky MK, Bullister E, Kytömaa HK. Validation of a CFD model for vapor dispersion from LNG spills into an impoundment. American Institute of Chemical Engineers Spring National Meeting, Houston, TX, April 2007.

Kytömaa H. LNG hazards for offshore and onshore LNG receiving terminals. Invited speaker/faculty member, LNG Development in the Northeast, Boston MA, December 5, 2006.

Gavelli F, Bullister E, Kytomaa H. Application of the fluent model to LNG spills over water. The Status of CFD Models for LNG Exclusion Zones. Gas Technology Institute Seminar Houston, TX, September 13, 2006.

Kytömaa H. Modeling and simulation in the USA. Keynote address, MASI Conference on Modeling and Simulation, Jyväskylä, Finland, May 9, 2006.

Kytomaa H., Gavelli F. Rangwala A. Leakage of liquid from a cryogenic container. LNG: The Environmental and Safety Agenda Operations/Emergency Preparedness and Response AIChE Meeting, Vancouver, BC, September 13, 2005.

Kytömaa H. Risks and common misconceptions associated with LNG. Breakfast Seminar, the Downtown Club at Plaza, Houston, TX, May 25, 2005.

Gavelli F, Foulds J, Sire R, Kytömaa H. Root cause analysis of a gas turbine compressor stator blade failure. ASME Power Conference, Chicago, IL, 2005.

Myers T, Kytömaa H, Smith T. Environmental stress-corrosion cracking of fiberglass: Lessons learned from failures at small chemical facilities. Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2005.

Kytömaa H. The Cleveland 1944 accident: History's worst liquefied natural gas (LNG) accident. Modern Marvels: Engineering Disasters 10, The History Channel, October 26, 2004.

Kytömaa H, Hinze P. Scientific fire investigation of automotive fires. Bowman and Brooke, LLP, Hot Topics Seminar Series, September 15, 2004.

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Kytömaa H. Scientific investigation of fires and explosions. Georgia Defense Lawyer's Association, 36th Annual Meeting, Hilton Head, SC, July 2003.

Kytömaa H. Lessons learned in fire investigations. Trial Attorneys of America, Annual Meeting, Chicago, IL, June 2002.

Kytömaa H. Building air circulation and carbon monoxide poisoning. NFPA World Safety Conference, Minneapolis, MN, May 2002.

Kytömaa H. Fires and explosions in vapor control systems: A lessons learned anthology. AIChE Spring National Meeting, New Orleans, LA, March 2002.

Kytömaa H. Use of PowerPoint in the court room. International Association of Defense Counsel, Tucson, AZ, February 2002.

Kytömaa H. Explosions and fires accident reconstruction. Propane Gas Defense Association Meeting, Atlanta, GA, April 2001.

Kytömaa H. Investigation of a loading dock naphthalene fire. American Institute of Chemical Engineers Process Plant Safety Symposium, AIChE Spring National Meeting, Houston, TX, April 2001.

Kytömaa H. The use of technology in fire investigations. DRI Conference, Las Vegas, NV, February 2001.

Kytömaa H. Fire onboard DC-10 over New York City—A case study of the state of the art in aviation fire investigation. Thermal Sciences and Engineering, Exponent, Inc., March 1999.

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Kytömaa H. Hazards associated with vapour abatement systems: Machinery failures and safety. Trends in Technology, Law and Insurance, Helsinki, Finland, September 1997.

Kytömaa H. Hazards associated with fume collection and abatement systems: Process safety. AIChE Spring Meeting, Houston, TX, March 1997.

Kytömaa H. Safe operation of VOC collection/destruction systems. New England Environmental Expo, Boston, MA, May 1996.

Kytömaa H. Ultrasound in suspensions. Harvard University, Cambridge, MA, October 1994.

Kytömaa H. Unsteady fluidization of BiDisperse particulate systems. AIChE Meeting November 1993.

Kytömaa H. Shearing of dense suspensions. University of Surrey, Guildford, UK, July 1993.

Kytömaa H. The modeling of the dynamics of long fluid filled transfer lines. IKU, Trondheim, Norway, October 1992.

Kytömaa H. The propagation of ultrasound through dense suspensions. IKU, Trondheim, Norway, October 1992.

Kytömaa H. Acoustic measurements in very concentrated solid-liquid mixtures and internal imaging of liquefaction events. California Institute of Technology, Pasadena, CA, March 1992.

Kytömaa H. Ultrasonic measurements of liquefaction events. Mechanical Engineering Seminar Series, University of Michigan, Ann Arbor, MI, December 1991.

Kandlikar, S.G., Pisera, J., Kytomaa, H., and Thome, R.J. Heat transfer and pressure drop characteristics of magnet winding during cooldown with flow boiling of LN2. Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics, Dubrovnik, Yugoslavia, August 1991.

Kytömaa H. Acoustic properties of solid-liquid mixtures. Sibley School of Mechanical and Aerospace Engineering Colloquium Series, Cornell University, Ithaca, NY, March 1991.

Kytömaa H. Stability of multicomponent flows. Department of Mechanical Engineering, Johns Hopkins University, Baltimore, MD, November 1988.

Kytömaa H. On enhanced separation processes in three-component mixtures. Society of Rheology Annual Meeting. Atlanta, GA, October 1987.

Kytömaa H. Kinematic wave propagation in two-phase flows. Department of Mechanical Engineering Colloquium, University of California, Santa Barbara, CA, February 1986.

Reports

Kytomaa H, Rau C, Smith T, Huet R. Evaluation of the March 1995 failure of turbine generator #3 at Skeena Cellulose, Inc. Exponent Failure Analysis Associates, Menlo Park, CA, May 2003.

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Kytömaa H. Investigation of the explosion at the Nottingham filtration plant, Cleveland, Ohio. Exponent Failure Analysis Associates, Menlo Park, CA, November 5, 1999.

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Kytömaa H. Federal Express DC-10 fire on September 5, 1996. Exponent Failure Analysis Associates, Menlo Park, CA, July 18, 1997.

Kytömaa H, Häkkinen RJ, Hirsch C, Krause E. Computational fluid dynamics (CFD) technology programme 1995–1999. Helsinki, Finland, June 1997.

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Professional Affiliations

Member: American Society of Mechanical Engineers; American Institute of Chemical Engineers; Society of Fire Protection Engineering; Sigma Xi, The Scientific Research Honor Society; National Fire Protection Association

Expert Testimony of
Harri K. Kytömaa, Ph.D.
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Testimony History

Provenza v Yamaha Motor Company Ltd.	Deposition Evidentiary Hearing	District Court of Clark County Nevada Case No: A446708	2006
Betsey Murray v Eldean Yacht Basin, Ltd d/b/a Yacht Basin Marina	Deposition	State of Michigan in the Circuit Court for the County of Ottawa File No: 05-52932-NZ	2006 2007
El Dorado Chemical Company and Northwest Financial Company v Ingersoll-Rand Company	Deposition Trial	The Circuit Court of Union County Arkansas Case No.: CV2005-0444	2006
Rose Marie Holt and Robert Holt, Sr. v Royal Insurance Company of America, Great American Insurance Group and Tops Malibu, Inc. v Cascade Candle Company and Sonoco Products Co. v Vision Group International Corp. and David M. Dillion d/b/a Vision Group International Corp.	Deposition	Providence Superior Court C.A. No. 02-6299	2006
Metrokane, Inc. v. Built NY, Inc.	Deposition	United States District Court Southern District of New York No: 06-CV-14447 (LAK) (MHD)	2007
Employers Insurance Company of Wausau v. Medline Industries, Inc. and Creative Bedding Technologies, Inc.	Deposition	The United States District Court for the Middle District of Tennessee No. 3:06-0611	2007
Richard J. Lueders, Susan M. Lueders, Bethany Thomas, Estates of Thomas P. Lueders v. Key Hospitality & Healthcare Limited Partnership and Doubletree Grand Key Resort	Deposition	The Circuit Court of the Sixteenth Judicial Circuit and for Monroe County, Florida Case No. 2007-CA-97-K	2008
Joseph A. Beauregard, Jr. V Altec Industries, Fluidtech, Inc., Hydroforce and Timothy Healey	Deposition	Superior Court Commonwealth of Massachusetts Case No: 99-2119	2008

Colour Quest Ltd, Shell UK Ltd., West London Pipeline and Storage Ltd. United Kingdom Oil Pipeline Ltd., et al v Total Downstream UK Plc, Total UK Ltd., Hertfordshire Oil Storage Ltd., Chevron Ltd., Total Milford Haven Refinery, TAV Engineering Ltd., Motherwell Control Systems 2003 Ltd.	Trial	In the High Court of Justice Queen's Bench Division Commercial Court in re The Buncefield Incident Folio No. 1057	2008
Appleton Paper Inc and NCR Corporation v. George A. Whiting Paper Company, et al NCR Corporation v. Kimberly-Clark Corporation, et al.	Deposition	United States District Court for the Eastern District of Wisconsin Green Bay Division Case No. 08-CV-16-WCG Case No. 08-CV-0895-WCG	2009
Chestnut Village Condominium Trust v. Linc Credit LLC PP and Laars Heating Systems Company	Trial	United Sates District Court District of Massachusetts	2009
Motor Fuel Temperature Sales Litigation Practices	Deposition	United States District Court for the District of Kansas Case: 07-MD-1840-KHV/JPO	2009
Gila River Power, L.P and Union Power Partners LP v General Electric Company	Deposition Arbitration	United States District Court of Massachusetts Docket No: 71-198-Y-0040907	2009 2010
Alliance Pipeline Limited Partnership and Alliance Pipeline L.P. v C.E. Franklin Ltd. Mannesmann Demag AG, at, el	Arbitration	Court of Queen's Bench of Alberta Judicial District of Calgary	2010
Kay A. Reed and Charlie Wear, Trust Administrators for the Vornado Trust V Tyco Electronics Corporation, Global Wire Technologies of Indiana, Inc. GWT Investments, Inc.	Deposition	Superior Court of the State of California Case No. CGC-05-441279	2010

Compensation

Exponent Failure Analysis Associates, Inc. is compensated at $495.00 per hour for Harri K. Kytomaa's services.

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